

The Problem

Smoots Bay in Potomac River was once considered a highly productive nursery habitat for largemouth bass. Its productivity was due to the availability of submerged grasses in a large cove, which is a preferred spawning location in tidal rivers. Because of a variety of reasons, much of the submerged grasses in Smoots Bay died and have failed to re-emerge in the past 10 years. This habitat loss likely lessened population growth for largemouth bass on Potomac River, considered once as a world class fishery. This project aims to re-establish habitat to Smoots Bay and couple monitoring and periodic stocking to help improve the river-wide fishery.

Methods

- A taskforce including members of Maryland Department of Natural Resources (MDDNR), Chesapeake Bay Foundation, Maryland Bass Nation, and the National Harbor are working together to design an artificial reef using 160 mini-reef balls in 2016 (2.5 ft wide, 1.75 ft high, 200 lbs, 8 - 12 holes); linear stone arrangements of 20 feet long have been shown to improve catch of juvenile largemouth bass in freshwater and will be considered for this project.
- Reef balls will have woody material added to them to help provide a diversity and complexity of habitat for young fish to use and hide; a layered, circular arrangement of wood has been shown to be preferred by largemouth bass.
- National Harbor has offered \$10,000 to support the project; additional supplies and infrastructure support is provided by Chesapeake Bay Foundation who make and deploy reef balls throughout the Chesapeake Bay watershed.
- Maryland Bass Nation and MDDNR are currently seeking additional funding; MDDNR will request \$5000 to support the project and an additional \$5000 is being sought from bass tournament organizations, corporations, and private sponsors.
- MDDNR will seek permits for the project in 2015 and if permitted, work will begin in 2016 and include stakeholders and volunteers.
- Use 20 years of historical data and results of an annual survey by MDDNR to determine if the freshwater reef, the first of its kind in Maryland, provides benefit for largemouth bass.

Proposed Reef Locations



Reef Balls (photo courtesy of Chesapeake Bay Foundation)

Proposed Timeline

July 2015	Present ideas to Sport Fish Advisory Commission, Tidal Fish Advisory Commission, MDDNR, and general public.
August 2015	Complete website, present ideas to permitting agencies during a joint evaluation process, find match funding (tournament organizers and general public, \$100 per reef ball).
September 2015	Craft permits and submit to regulatory agencies.
March 2016	Begin planning for work for phase 1 site.
September 2016	Build 160 reef balls at National Harbor with help of volunteers and add wood to reef ball.
September 2016	Install 8" diameter pilings to provide warning signs and assist with structure placement; deploy buoys to mark specific locations of reef cluster.
October 2016	Deploy 160 reef balls in clusters of 8 to Phase 1 area at Rosalie Island and Phase 2 area.
Sept/Oct 2016	Continue long-term monitoring of site for juvenile and adult bass, as well as other aquatic species.
Winter 2016	Identify outreach tools, such as a kiosk or press release, to advertise the reef project.

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